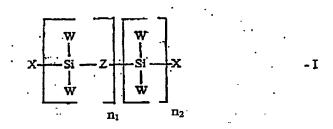
3

Amendments to the Claims:

- 1. (Previously amended) A branched copolymer of a polyolefin and a silicone polymer which is produced by melt phase reactive extrusion hydrosilylation.
- 2. (Original) The copolymer of claim 1 wherein said silicone polymer is a polysilane of the Formula I:

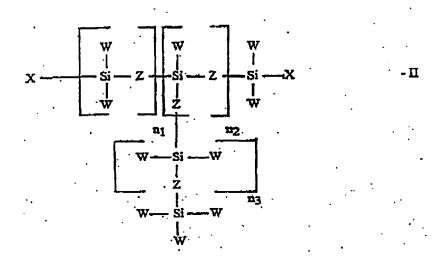


wherein X is an organic end group, W is an organic or inorganic group, with X and W being selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n_1 and n_2 are the number of repeating groups in the chain.

3. (Original) The copolymer of claim 2 wherein said polysllane of formula I is a polyhydrosiloxane of the formula:

4

4. (Original) The copolymer of claim 1 wherein said silicone polymer is a polysilane of the Formula II:

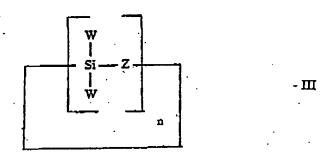


wherein X is an organic end group, W is an organic or inorganic group, with X and W being selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n_1 , n_2 and n_3 are the number of repeating groups in the chain.

5. (Original) The copolymer of claim 4 wherein said polysilane of Formula II is a branched polyhydrosiloxane of the formula:

5

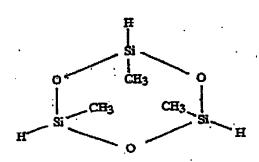
6. (Original) The copolymer of claim 1 wherein said silane polymer is a polysilane of the formula III:



wherein W is an organic or inorganic group selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n is the number of repeating groups in the chain.

6

7. (Original) The copolymer of claim 6 wherein said polysilane is a cyclic polyhydrosiloxane of the formula:



- 8. (Currently amended) A branched [[The]] copolymer of polypropylene (PP) and claim 1-wherein-said silicone polymer is a methylhydrosiloxane-dimethylsiloxane random copolymer (MDMS), said copolymer being produced by melt phase hydrosilylation.
- 9. (Original) The copolymer of claim 8 wherein the ratio of PP to MDMS is such that the copolymer contains free Si-H groups.
- 10. (Original) The copolymer of claim 9 which is coupled, through free Si-H groups, to an inorganic filler, inorganic surface, a hydroxy-containing polymer, vinyl-containing polymer or other polymer containing functional groups reactive with free Si-H.
- 11. (Original) The copolymer of claim 10 wherein said coupling is effected by a hydrosilylation reaction or a dehydrogenerative coupling reaction.
- 12. (Original) The copolymer of claim 9 wherein the free Si-H groups are cross-linked.

7

- 13. (Currently amended) The copolymer of claim 12 wherein free Si-H groups are <u>converted</u> eennected into a SI-OH group by a metal-catalyzed reaction with water and subsequently dehydrogenatively coupling to a second Si-H group.
- 14. (Original) The copolymer of claim 12 wherein Si-H groups are reacted by dehydrogenative coupling.
- 15. (Original) The copolymer of claim 8 which is coupled to metallic, glass, ceramic or other vitreous surface.
- 16. (Cancelled)
- 17. (Cancelled)
- 18. (Original) A process of forming a branched polypropylene, which comprises effecting melt phase hydrosilylation of a terminally-unsaturated polypropylene in the presence of a methylhydrosiloxane-dimethylsiloxane random copolymer (MDMS).
- 19. (Original) A process of forming a branched polypropylene, which comprises:

 effecting hydrosilylation at a vinyl end of polypropylene with a trialkoxysilane to form a functionalized polymer, and

thereafter effecting post-reaction branching of the functionalized polymer by reacting Si-OR groups to form a Si-O-Si bridge.

- 20. (Previously added) The copolymer of claim 1 wherein said polyolefin is polypropylene.
- 21. (Previously added) A process of forming a branched copolymer, which comprises:

treating a polyolefin with peroxide to provide terminal unsaturation, and reacting the terminally-unsaturated polyolefin with a silicone polymer containing at least two Si-H groups in a melt phase reactive extrusion hydrosilylation reaction.

8

22. (Previously added) The process of claim 21 wherein said polyolefin is polypropylene.